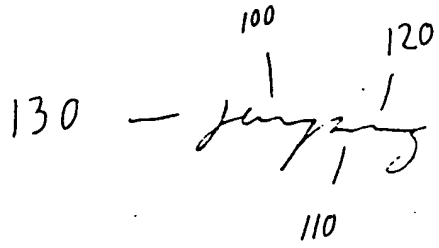
Figure 1



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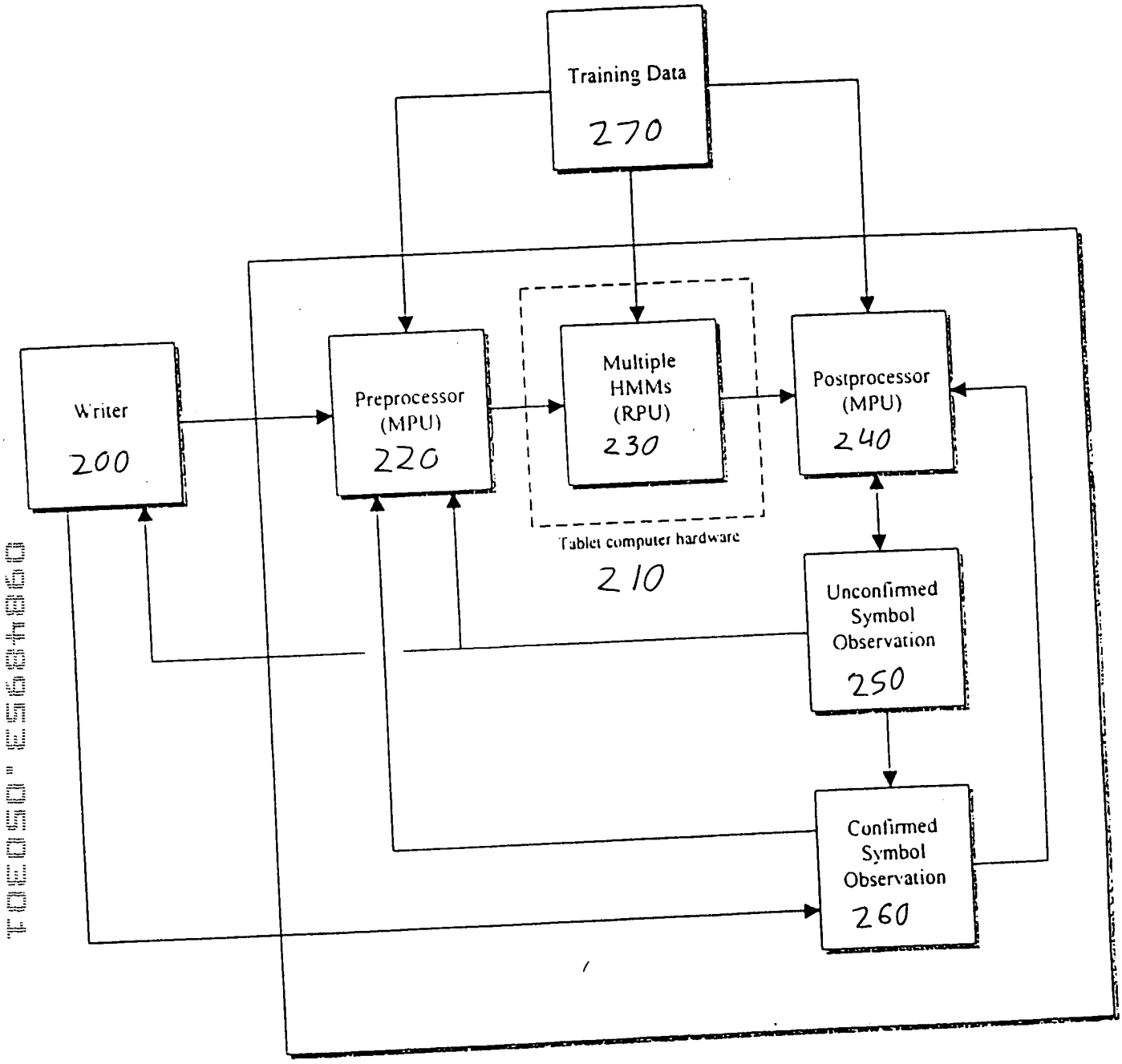
Training Data
270
Writer
200
Preprocessor
(MPU)
220
Multiple
HMMs
(RPU)
230
Postprocessor
(MPU)
240
Tablet computer hardware
210
Unconfirmed
Symbol
Observation
250
Confirmed
Symbol
Observation
260

Figure 2

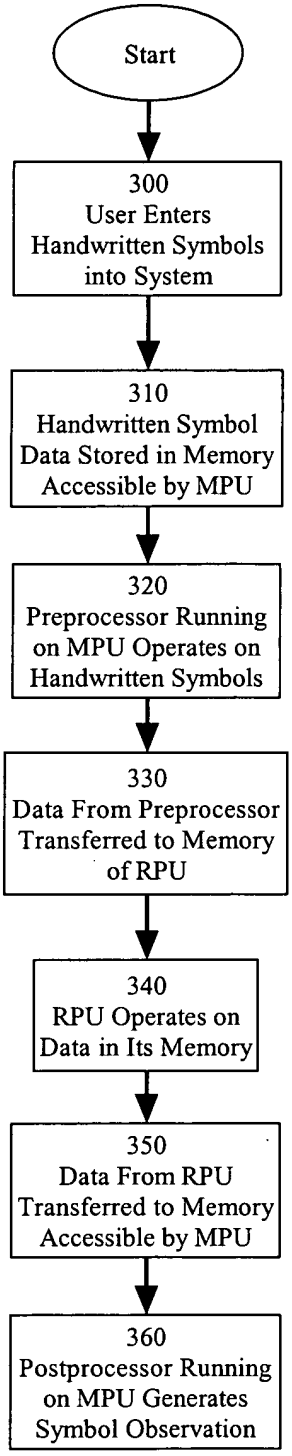
Start
300
User Enters Handwritten Symbols into System
310
Handwritten Symbol Data Stored in Memory Accessible by MPU
320
Preprocessor Running on MPU Operates on Handwritten Symbols
330
Data From Preprocessor Transferred to Memory of RPU
340
RPU Operates on Data in Its Memory
350
Data From RPU Transferred to Memory Accessible by MPU
360
Postprocessor Running on MPU Generates Symbol Observation

Figure 3

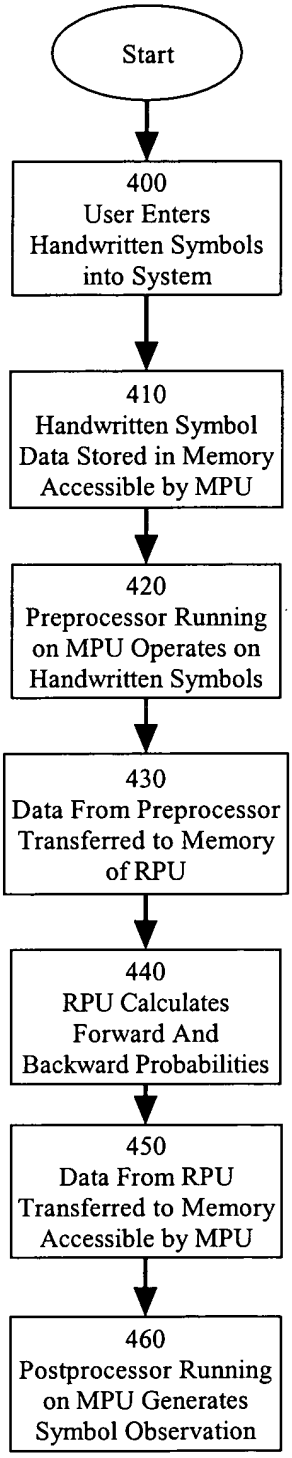

Figure 4

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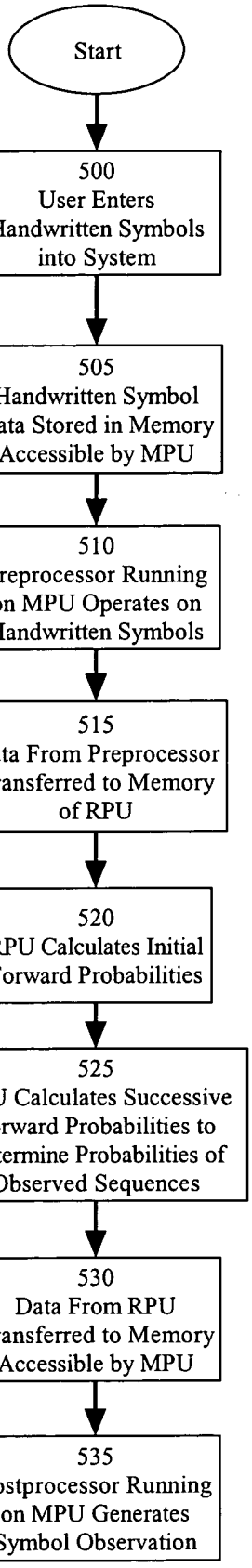
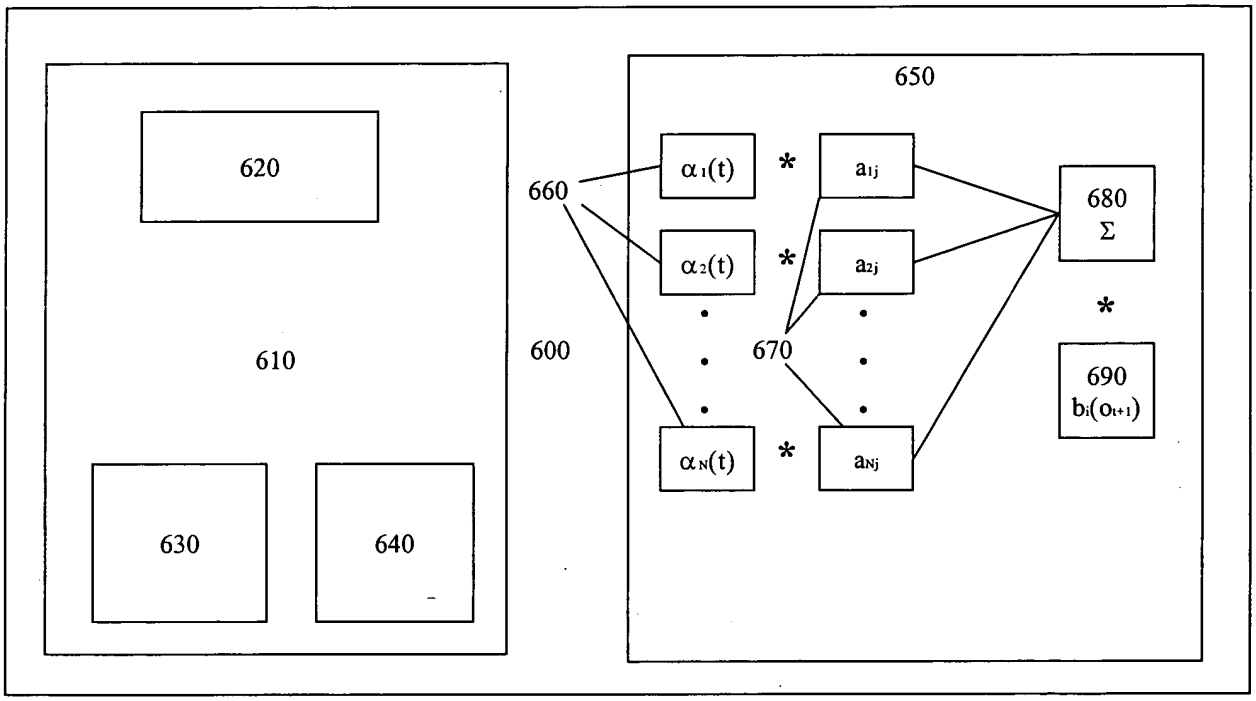

Start
500
User Enters Handwritten Symbols into System
505
Handwritten Symbol Data Stored in Memory Accessible by MPU
510
Preprocessor Running on MPU Operates on Handwritten Symbols
515
Data From Preprocessor Transferred to Memory of RPU
520
RPU Calculates Initial Forward Probabilities
525
RPU Calculates Successive Forward Probabilities to Determine Probabilities of Observed Sequences
530
Data From RPU Transferred to Memory Accessible by MPU
535
Postprocessor Running on MPU Generates Symbol Observation

Figure 5

Figure 6


620
610
630
640
650
660
600
670
$\alpha_1(t)$
$\alpha_2(t)$
$\alpha_N(t)$
a_{1j}
a_{2j}
a_{Nj}
680
Σ
690
$b_i(o_{t+1})$

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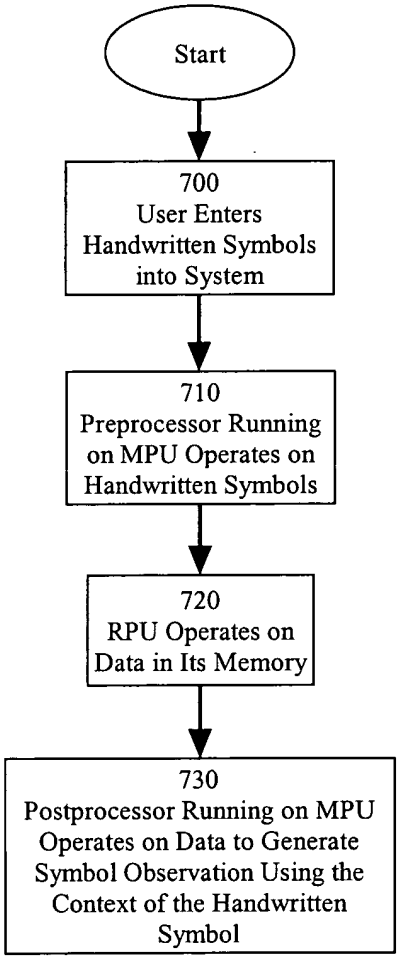

Figure 7

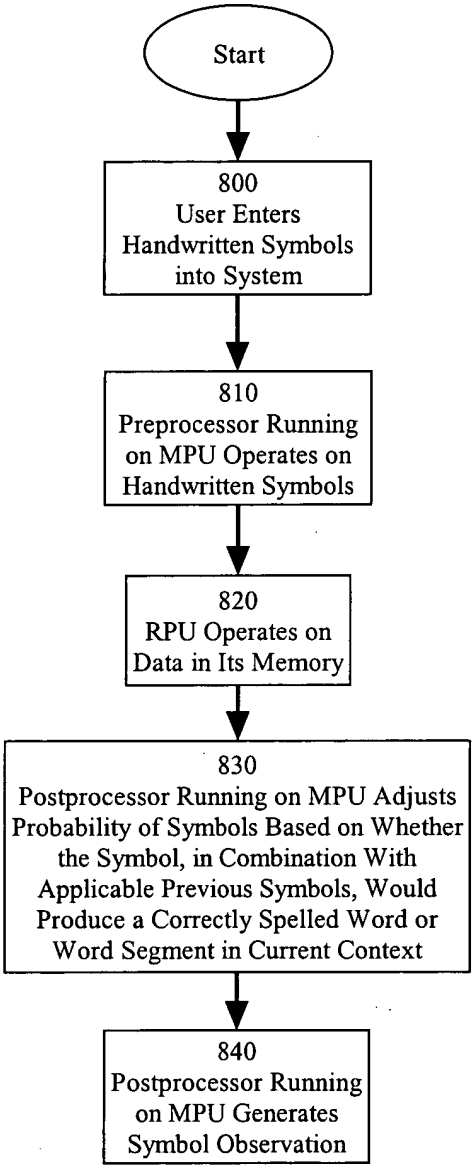
Start
800
User Enters Handwritten Symbols into System
810
Preprocessor Running on MPU Operates on Handwritten Symbols
820
RPU Operates on Data in Its Memory
830
Postprocessor Running on MPU Adjusts Probability of Symbols Based on Whether the Symbol, in Combination With Applicable Previous Symbols, Would Produce a Correctly Spelled Word or Word Segment in Current Context
840
Postprocessor Running on MPU Generates Symbol Observation

Figure 8

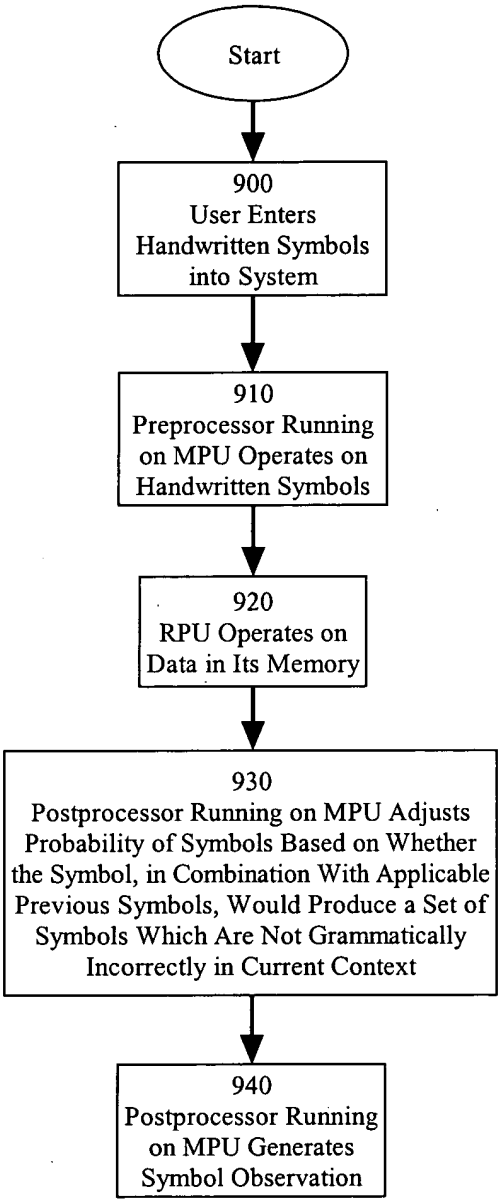

Figure 9

Patent - 05/03/05

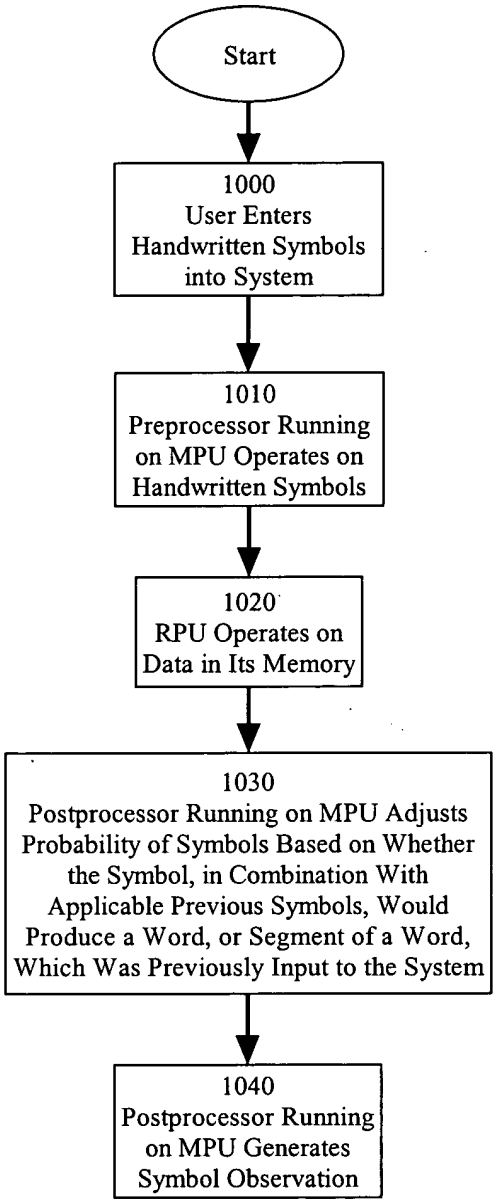

Figure 10

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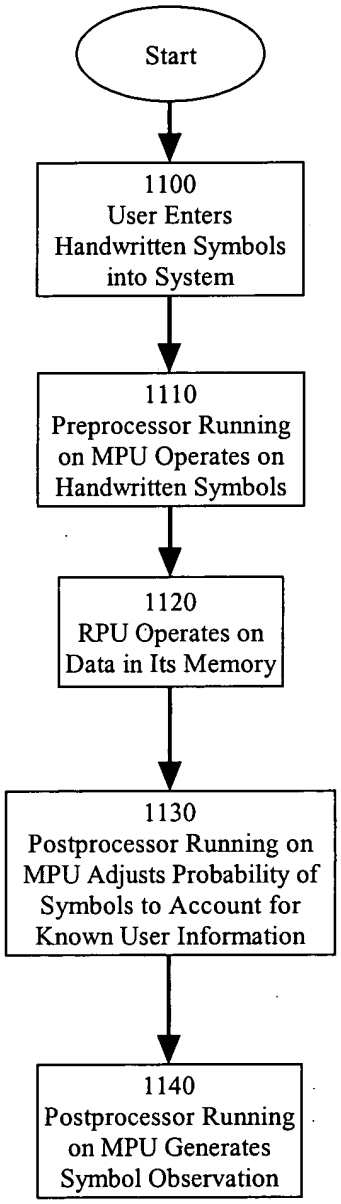
Start
1100
User Enters Handwritten Symbols into System
1110
Preprocessor Running on MPU Operates on Handwritten Symbols
1120
RPU Operates on Data in Its Memory
1130
Postprocessor Running on MPU Adjusts Probability of Symbols to Account for Known User Information
1140
Postprocessor Running on MPU Generates Symbol Observation

Figure 11